

ABSTRACT

Composite hydraulic molding that results in low cost, lightweight and strong composite structures. In accordance with the process, reinforcing material, which may be a mat and/or fabric of high strength filament, is placed in a mold, an inflatable tube 34 is placed over the reinforcing material and further reinforcing material, which may be integral with the reinforcing material under the inflatable tube, is placed over the inflatable tube. The mold is closed, and a thermosetting resin is pumped into the mold. The inflatable tube 34 is then inflated with a liquid, saturating the reinforcing material and forcing any air in the mold out of one or more bleeder holes in the mold. After curing the resin, the inflatable tube 34 is deflated and removed and the mold opened to remove the molded part. Various embodiments and additional features are disclosed.